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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,987	12/09/2003	Sang Chul Yoon	2832-0167P	2750
2292 7590 01/04/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER WALSH, JOHN B	
			ART UNIT 2151	PAPER NUMBER
			NOTIFICATION DATE 01/04/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/729,987

Applicant(s)

YOON ET AL

Examiner

John B. Walsh

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/13/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 2, 10, 14, 15 and 23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 4 and 7 of U.S. Patent

No.7,287,393. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are not patentably distinct and the claims of the present application are anticipated by the U.S.P.N. ‘393.

3. Claims 1, 2, 10, 14, 15 and 23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 12 of U.S. Patent No. 7,082,353.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are not patentably distinct and the claims of the present application are anticipated by the U.S.P.N. '353.

4. Claims 1, 2, 10 and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8 and 14 of U.S. Patent No. 7,062,927.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are not patentably distinct and the claims of the present application are anticipated by the U.S.P.N. '927.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-6, 8-19 and 21-26 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2001/0036192 to Chiles et al.

As concerns claim 1, an integrated controlled multi-air conditioner system comprising: a plurality of groups of indoor units (0035); a plurality of outdoor units (0034; 0035) connected with said indoor unit groups, respectively; at least one local control means (115,415,1215)

connected in common with said outdoor units over an internal network for controlling operations of said outdoor units; and protocol conversion means (0049) connected with said local control means, said protocol conversion means converting different communication protocols of data transmitted and received between an external Internet network and said internal network into each other to transfer a control command received over said external Internet network to at least one of said outdoor units.

As concerns claims 2 and 15, further comprising integrated control means (0036; 240) for transferring a control command to said outdoor units via said protocol conversion means to control said outdoor units in an integrated manner.

As concerns claims 3 and 16, wherein said integrated control means is assigned a public Internet protocol (IP) address and a private IP address so that it is accessible from said external Internet network and internal network, respectively (0084,0085,0086).

As concerns claims 4 and 17, wherein said protocol conversion means is assigned a public IP address and a private IP address so that it is accessible from said external Internet network and internal network, respectively (0081,0084,0085,0086).

As concerns claims 5 and 18, further comprising IP translation/sharing means assigned a public IP address so that it is controllable from said external Internet network, said IP translation/sharing means translating said public IP address contained in a control command received from said external Internet network into a private IP address and transferring the received control command to said integrated control means or protocol conversion means on the basis of the translated private IP address (0081,0084,0085,0086).

As concerns claims 6 and 19, wherein said IP translation/sharing means is adapted to store a table including private IP addresses and port numbers assigned respectively to all devices connected to said internal network (0067,0081,0086).

As concerns claims 8 and 21, wherein said integrated control means includes: a timer for establishing synchronization (inherent communication will have synchronization) of a control system of said integrated control means; a key input unit (268) for inputting commands for control of the operations of said outdoor units; a display unit (270) for displaying the control commands inputted through said key input unit and the associated outdoor unit/indoor unit control states; a central processing unit (252) for controlling signal input and output of said key input unit and display unit and transmission and reception of data over said internal network; and a wired interface (0012) for transmitting and receiving data between said central processing unit and said protocol conversion means according to an Ethernet protocol (figure 6; 618, 620).

As concerns claims 9 and 22, wherein said integrated control means further includes a wireless interface for transmitting and receiving data in a wireless (0006) manner based on a wireless Ethernet protocol (figure 6; 618, 620).

As concerns claims 10 and 23, wherein said protocol conversion means includes: an Internet interface for transmitting and receiving data to/from said external Internet network according to an Ethernet protocol (figure 6; 618, 620); a serial communication interface for transmitting and receiving data to/from said local control means according to a serial communication protocol (0008); and communication control means for controlling transmission and reception of data between said Internet interface and said serial communication interface (0049).

As concerns claims 11 and 24, wherein said communication control means includes: an address storage unit for storing a private IP address and port number assigned to said local control means; and a protocol converter for converting different communication protocols of data transmitted and received between said Internet interface and said serial communication interface into each other (0008).

As concerns claims 12 and 25, wherein said communication control means further includes a graphic user interface (GUI) storage unit for storing a GUI-based air conditioner control program for enabling a user to remotely control said local control means or outdoor units using an Internet terminal accessible to said external Internet network (0036).

As concerns claims 13 and 26, wherein said GUI storage unit is adapted to send said air conditioner control program over said external Internet network in response to a request from said Internet terminal (0036).

As concerns claim 14, an integrated controlled multi-air conditioner system comprising: a plurality of groups of indoor units (0035); a plurality of outdoor units (0034; 0035) connected with said indoor unit groups, respectively; a plurality of local control means (240) connected with said outdoor units over an internal network for controlling operations of said outdoor units, respectively; and a plurality of protocol conversion means (0049) networked with said plurality of local control means, respectively, each of said plurality of protocol conversion means converting different communication protocols of data transmitted and received between an external Internet network and said internal network into each other to transfer a control command received over said external Internet network to a corresponding one of said outdoor units.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Application Publication 2001/0036192 to Chiles et al. as applied above in view of U.S.

Patent No. 6,141,339 to Kaplan et al.

Chiles et al. '192 do not explicitly disclose a hub.

Kaplan et al. '339 teach a hub (204).

It would have been obvious to one having ordinary skill in the art at the time of the invention to provide the network of Chiles et al. '192 with a hub, as taught by Kaplan et al. '339, in order to provide a means for connecting multiple devices. Such a modification is merely a combination of known elements yielding predictable results.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

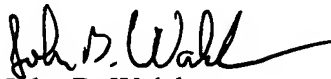
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Thursday from 7:00-5:30.

Application/Control Number:
10/729,987
Art Unit: 2151

Page 8

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


John B. Walsh
Primary Examiner
Art Unit 2151